

## ABSTRACT

The present invention is an ignition resistant polymeric composite comprising a) a polymeric substrate; b) a flame retardant intermixed with the polymeric substrate; and c) a partially oxidized plasma polymerized organosilicon layer adhered to the substrate. The  
5 ignition resistant composite can readily achieve a V-0 rating in a UL-94 flammability test using a substantially lower concentration of flame retardant than is commonly incorporated into substrates to achieve the same result. Consequently, the present invention addresses the need to maintain the integrity of a substrate incorporated with flame retardant to reduce the levels of environmentally suspect materials.